

Abstract of the Disclosure

A passive temperature-compensated optical grating arrangement includes a housing of low CTE material, with the optical grating stretched across the housing between a first, fixed sidewall and a lever arm, the lever arm also being formed of a low CTE material. An expansion element of high CTE material is attached to the frame and disposed to contact the lever arm, resulting in rotating the lever arm as changes in temperature change the dimensions of the expansion element. By properly sizing the lever arm and the expansion element, changes in grating wavelength as a function of temperature can be compensated for by adjusting the strain applied to the grating as it is pulled or compressed as the lever arm is moved.